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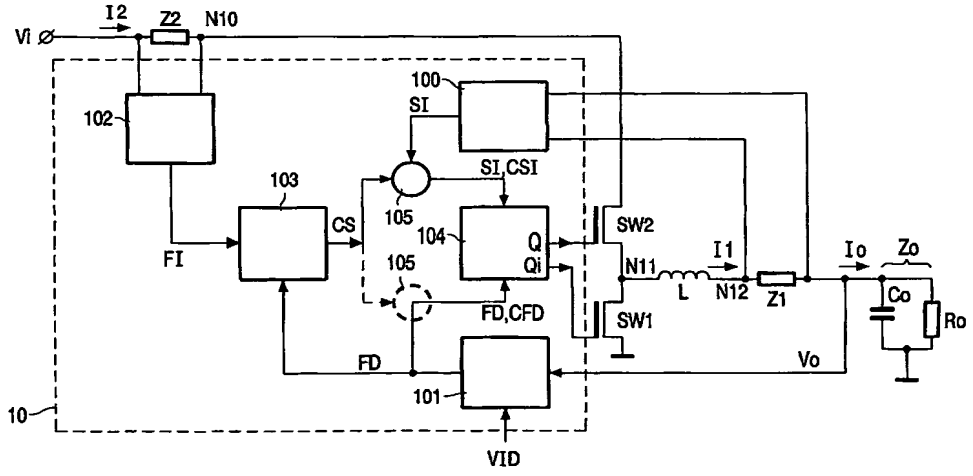
(54) Title: A SWITCH MODE POWER CONVERTER




(57) Abstract: A load line regulated switched-mode power converter supplies an output voltage (Vo) and an output current (Io) to a load (Zo). The power converter comprises an inductor (L), a switch (SW2) coupled to the inductor (L), a first impedance (Z1, Rs, Rcu), a second impedance (Z2, Rs), and a power converter controller (10). The power converter controller (10) comprises a first sense circuit (100) to obtain momentary information (SI) on a first current (11) which flows through the first impedance (Z1), and which is related to the output current (Io). A difference between a zero load voltage (VID) and the output voltage (Vo) is determined (101) to obtain a difference level (FD). A second sense circuit (102) supplies further information (FI) on a second current (12) which flows through the second impedance (Z2, Rs), and which is related to the first current (11). An integrator (103) integrates a difference between the further information (FI) and the difference level (FD) to obtain a correction signal (CS). A switch controller (104, 105) receives the difference level (FD), the momentary information (SI) and the correction signal (CS) to control the switch (SW2) to obtain a substantially zero correction signal (CS) in a steady state.

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